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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,081	11/25/2003	Yoshikazu Miwa	053434	4933
<div>38834 7590 10/18/2007 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036</div>				
			EXAMINER HUSON, MONICA ANNE	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,081

Applicant(s)

MIWA ET AL.

Examiner

Monica A. Huson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 and 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 081007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the Amendment filed 20 July 2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 11, 13, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ide et al. (U.S. Patent 6,186,765), in view of Koji (JP 11-105157). Regarding Claims 1-3, 5, 13, and 24, Ide et al., hereafter "Ide," show that it is known to carry out a method comprising preparing a co-extruded long molding body including a molding main body made of thermoplastic material and a decorative layer higher than the molding main body in hardness and melt temperature, the main so that the decorative layer is provided along a longitudinal direction of the molding main body on a surface thereof (Figure 4; Column 9, lines 11-25); setting the molding body in a fixed die such that a back surface side of said co-extruded long molding body which is opposite of said decorative layer faces said fixed die (Figure 4, element 16B); heating and softening an end portion of the molding body while maintaining a condition in which the decorative layer is harder than the molding main body (Column 9, lines 11-25, 47-49); and press forming the end portion of the molding body, while maintaining a condition in which the decorative layer is harder than the molding main body, by pressing a movable punch onto the fixed die while the end portion of the molding body is in a heated and softened state to bend the end portion of the molding body to obtain an end cover portion having a predetermined shape (Column 9, lines 42-47), wherein said press forming is performed in an oblique direction with respect to the longitudinal direction of the molding, so that the decorative layer of the end portion moves closer to the die (Figure 5, element 24a, 24b). Ide does not show heating using irradiation. Koji shows that it is known to heat a die using irradiation with a near infrared heating device which alternately increases and decreases with a lapse of time (para. 0012, Figures 2, 4-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Koji's near infrared heating during Ide's molding process in order to efficiently heat the compression die. It is noted that

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independent claims 5, 13, and 24 are variants of independent claim 1; these claims are similarly suggested by Ide, with the exception of irradiative heating as noted above.

Regarding Claim 11, Ide shows the process as claimed as discussed in the rejection of Claim 5 above, including a method further comprising trimming an end of the bent end portion (Column 13, lines 52-67), meeting applicant's claim.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ide and Koji, further in view of Costello (USPN 3655173). Ide is silent to the reflecting mirror and the lamp being farther than the focal length. However, defocused radiation sources having a reflector and a lamp located at a distance farther than the focal length are conventional in the art. See Costello's teachings at 3:1-12, which would provide a near infrared ray. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Costello into that of Ide in order to provide more uniform heating of the surface (3:9).

Claims 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ide and Koji, further in view of Loy (U.S. Patent 3,830,680).

As to Claim 7, because Loy clearly suggests pressing into the corner, it would have been prima facie obvious to press at an angle which divides the bending angle of the fixed die into halves. As to Claim 8, because the actuator of Loy (Item 72) appears to be attached to a fixed length arm, the movement would obviously be nonlinear during actuation. As to Claim 9, because the actuator of Loy (Item 72) would operate in an arc, it would obviously be separate from the dividing line of the bending angle except in the vicinity of engaging the fixed die. As to Claim 10, because both Koji (Drawing 4) and Loy (Fig. 6) teach application of the infrared radiation to only the part to be bent or folded, by their location in an ambient environment, the fixed die and movable punches would obviously have been at an ambient temperature cooler than the temperature of the end portion. As to Claim 12, in either the method of Koji (Drawings 3-6) or Loy (Figs. 5-7), bending of the end portion while compressing between the fixed die and movable punch would have been an obvious aspect in order to improve the appearance of the edge by folding.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ide and Koji, further in view of Hideyasu (JP 2001-088155).

As to Claim 14, Hideyasu provides embedding a core material having an obviously greater rigidity than that of the molding main body into the leg portion (Drawing 17, item 85),

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removing the core material in the second region (Drawing 15, bent end), and the portion without the core material being bent (Drawing 15). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Hideyasu's removal step during Ide's molding process in order to most efficiently form the desired molded object.

Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ide and Koji, further in view of Davies (U.S. Patent 2,500,895).

As to Claim 25, the radius of curvature of Davies' has an internal angle portion which fulfills the claimed condition, and in the alternative, it would have been prima facie obvious to vary the shape of the end for desirable aesthetic effect. As to Claim 26, the moving forward of Davies shortens a length of the end bending portion. As to Claims 27 and 28, Hideyasu covers the end of the distal portion (Fig. 4), and thus it would fulfill the condition that "a temperature of the distal end of the end bending portion is reduced than a temperature of a bending center of the end portion", and doing so would obviously maintain the end portion in a harder condition. As to Claim 29, in the setting step, Davies' protruding end is set longer than a length of the finished end cover portion and shorter than a length of the front forming surface of the movable punch (Fig. 5, J'), and in the step of moving the first movable punch, the punch closes the fixed die so that an end of the bending portion remains in the cavity, and the second movable punch is moved toward a part of the cavity opposing to the end of the end bending portion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Monica A. Huson". The signature is fluid and cursive, with the first name "Monica" being more prominent than the last name "Huson".

Monica A Huson

October 15, 2007